Congruent and Similar Triangle Investigation

Activity One

1. Cut out the three strips of paper below. Place the strips together corner-to-corner to create a triangle.

2. Compare your triangle to your partner's and to the other triangles in the class. What do you notice?

3. How can you prove that this is true?

4. Carefully place your triangle onto a piece of paper- place a piece of patty paper on top of your triangle and trace the inside of the triangle formed. Label Side 1 AB and Side 2 BC and then side 3 will be AC. Measure each angle.

5. Is your triangle congruent to your partner's triangle? Use mathematics to justify your answer.

Side 1 Side 1

Side 2 Side 2

Side 3 Side 3

Answers: The triangles will all be congruent, which can be explained by the side-side-side triangle congruence theorem (some of the triangles may need to be flipped or rotated to show congruence). After the angles have been measured, ASA, SAS, or AAS congruency theorems can be used to prove the triangles congruent.